

how important your back-up automated mission planning system is to your unit's success.

Computer literacy is being taken out of most Army courses. This is not a bad idea, since most officers today come out of college knowing how to use computers. But in the place of computer literacy, schools must teach information systems. Just as the necessary mechanization topics are taught in branch officer basic courses, the beginnings of education in information systems must also be taught there. An officer's information systems education must then continue at every military education level, because the years between the courses can mark large advances in computer technology. In addition, higher level headquarters use information technology differently and more extensively than lower level headquarters. As an officer is being prepared for higher level staffs, he needs additional

education in information systems. For example, command and staff courses prepare officers for staff duty at division and corps levels. The understanding of information systems required by a corps staff is different from that required at brigade level, which is taught at branch ad-

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***Understanding automation today is becoming as critical as understanding mechanization.***

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vanced courses. The service schools should reflect this difference when teaching information systems.

This will require changes in the schools. We don't have enough system automation officers (Functional Area 53) to meet all the Army requirements now. Although system automation officers may not even be the best choices for instructors, the Army does not have a large

pool of instructors available to teach these topics in service schools and courses.

As the battlefield changes, the Army is relying on more and more automation. The officer corps must understand the big picture when dealing with the integration of computers into organizations. This level of understanding cannot be learned through computer literacy programs. An officer must receive an information systems education that spans his entire career. He cannot rely completely on an automation staff, especially on a topic that touches almost all aspects of his command.

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# Chemical Company Support To Light Infantry with Non-Lethal Weapons

**CAPTAIN RUSSELL A. FLUGEL**

The U.S. Army Chemical Corps currently supports the Army's light infantry divisions (including airborne and air assault) with dual-purpose (smoke and decontamination) companies. It will always be essential that the Chemical Corps be prepared to support decontamination contingencies, but light division smoke support requirements are becoming increasingly limited.

As the Army redefines its role for the 21st century through the Force XXI concept, the Chemical Corps must make appropriate changes at the lowest level to support the redesign of the division as the central element of strategic land power. The best way for the Chemical Corps to secure a future role in support of the Force

XXI light division is to augment the current mission of dual-purpose chemical companies with the offensive capability of non-lethal weapons.

Because of the constraints involved with rapid strategic mobility, light divisions set their deployment priorities according to the level of threat. Since light division missions increasingly involve low-intensity conflict (LIC) or operations other than war, chemical companies often find themselves at the bottom of the division's deployment priority list, or not on it at all. The reason for this is that smoke offers no offensive capability and is seldom essential to light division missions. Outside of conventional operations, there are few smoke requirements

in light divisions that cannot be met by smoke pots or grenades. Non-lethal weapons, however, represent an essential offensive alternative for light infantry commanders as they prepare for more LIC missions in the 21st century.

The Army is already making the transition to the Force XXI concepts of power projection and broad-range missions, and many of these missions belong to the light divisions. It is clear from past operations that these types of light division missions do not require smoke.

The most recent example is Operation Uphold Democracy in Haiti, in which the benefits of non-lethal, crowd control assets outweighed those of smoke. During the 82d Airborne Division's September

1994 preparation for the mission, staff planners analyzed the threat and determined that there was only a minimal requirement for the deployment of two smoke HMMWVs (high-mobility multipurpose wheeled vehicles) for possible use in dispersing crowds. There was, however, a significant requirement (beyond the capability of military police assets) to control crowds and possible riots with incapacitating but non-lethal agents.

The 82d Division chemical section quickly focused its efforts on obtaining pepper spray from civilian agencies for use by military personnel. This operation demonstrated that non-lethal agents such as cayenne pepper can help commanders deal with hostile crowds and clear urban areas, but it also demonstrated that division leaders and soldiers lacked experience in employing pepper spray.

The Army's Training and Doctrine Command therefore assigned proponentcy for this issue to the U.S. Army Chemical School and directed that doctrine be developed to support training with and storage and employment of cayenne pepper.

A chemical company specializing in the employment of non-lethal weapons and doctrine based upon these requirements could give every light division commander a significant offensive alternative to lethal force. Ideally, chemical companies could store and employ non-lethal weapons and provide personnel decontamination as required.

The use of so-called "smart bombs"

during Operation *Desert Storm* represented a first step in the effort to reduce collateral damage. The evolutionary role of non-lethal weapons will continue to increase as this effort grows more important at all levels.

While it is quite possible that one day each soldier may head off to battle with a non-lethal weapon (such as a pepper spray can), it is also important that the Army take advantage of larger scale non-lethal weapons that require collective employment. Since these weapons involve the use of non-lethal chemicals, this mission would be well-suited to the Chemical Corps.

Less than lethal (LTL) and riot control agent (RCA) programs range from large volume RCA dispersers to RCA foam agent producers (for area denial). Even a relatively low-technology modification of the chemical company's organic pressurized water-spray equipment could enable light infantry commanders to control and disperse crowds with water. Chemical companies using the technologies described could augment military police (enabling them to continue their traffic control and enemy prisoner of war missions) by foaming large areas and denying them to personnel or by controlling riots using water spray equipment.

It is important to begin developing chemical units capable of using available basic riot control technologies. The Chemical Corps should commit to modernizing the force by placing a greater

emphasis on the development of non-lethal weapons as well as working to ensure that the Chemical Weapons Convention Treaty allows their incorporation into the force as soon as they are developed and tested for safety. By establishing non-lethal weapon units early, the Chemical Corps can best position itself for the successful future integration of developing technologies (including proposed antitraction, antimateriel, and metal embrittlement technologies).

Because most unconventional light division missions have limited smoke requirements, dual-purpose chemical companies are ideal for reconfiguration to incorporate existing non-lethal technologies. The chemical corps should pursue this requirement because the technology involves chemicals, or it could simply modify already existing water haul and spray equipment. Augmenting the military police in riot and crowd control could significantly assist light division commanders and also prove the value of having a chemical company at the division level.

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# Tactical PSYOPs

## Supporting the Infantry Brigade and Battalion

MAJOR JAMES C. BOISSELLE

Psychological operations (PSYOPs) have been a key part of every major military operation in the past several years. Elements of the 4th Psychological Opera-

tions Group (Airborne) and selected Reserve Component PSYOP units have operated alongside Army, Air Force, Navy, and Marine Corps forces in major opera-

tions, including *Just Cause* in Panama, *Desert Shield/Storm* in the Persian Gulf, *Restore Hope* in Somalia, and *Uphold Democracy* in Haiti. A PSYOP task force